

REMARKS

Claims 1, 2, 4 and 7-9 are currently pending in this application as amended. By this Reply, claims 1, 4 and 7 have been amended, and claims 2, 5 and 6 have been canceled. Additionally, Figures 1-3 of the drawings have been amended and paragraphs [0036] and [0038] of the Specification have been amended in order to address the formalities noted in the Action. No new matter has been introduced into the application by these amendments. Replacement drawings sheets are attached which incorporate the drawing amendment.

In the Action, the drawings were objected to as not showing every feature of the invention specified in the claims. In particular, the forward saw blade guide and the rearward saw blade guide each with a plurality of interchangeable plates having different spaces between the contact surfaces and the drive shaft as set forth in claims 3 and 4 were not specifically shown. In response, applicants have amended Figures 1 and 2 in order to show additional ones of the interchangeable plates with the different spacings between the contact surfaces and the drive shaft in dashed lines. Accordingly, withdrawal of this objection to the drawings is respectfully requested.

The drawings were also objected to since reference sign "19" was not shown. This was in fact due to an erroneous label in Figure 3, which has now been corrected as

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shown in the attached sheet. Accordingly, withdrawal of this objection to the drawings is respectfully requested.

The Specification was also objected to as failing to teach the forward saw blade guide and rearward saw blade guide each being selectable from a plurality of interchangeable plates having different spaces between the contact surfaces and the drive shaft. Applicants respectfully traverse this objection to the Specification and note that the application, specifically at paragraphs [0013], [0017] and [0036], discloses that the saw blade guides 4, 5 can be made plate-shaped and interchangeable. The saw blade guides are shown as plate-shaped. As amended Figures 1 and 2 of the drawings now show, a second set of the interchangeable plates which clearly illustrates the different spacings between the contact surfaces (6) and the drive shaft are provided. It would be apparent that for a smaller diameter saw blade, that this radial spacing would be shorter in order to maintain the contact surface (6) near the periphery of the blade but not extending beyond the edge of the blade. It is clear that the radial distance between the contact surface of the saw blade guides and the drive shaft on any particular one of the interchangeable plates would not be adjustable in view of it being on a fixed plate. However, this distance is "adjustable" according to the new invention through interchanging of the plates, as is noted in the Specification and clearly understood by the examiner in the Action based on the notation in connection

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with the embodiment shown in Figures 1 and 2. However, the remainder of the drawings and the Specification also discuss the alternative means for "adjusting" this distance using the adjustable mounting (12) which is illustrated as having three pivot positions. See paragraph [0038]. The reference in the Action to the retaining screw (10) as having any function with respect to the adjustability of the radial distance is incorrect, except for the fact that the retaining device (10) allows the interchangeable plates to be replaced and also allows a different spacing between the contact surfaces (6) of the opposing interchangeable plates to be obtained through the use of the adjustment bushing (16) in connection with the spacer (9). However, this can be used in connection with either the interchangeable plates used as the forward and rearward saw blade guides or in connection with the adjustable mounting (12). This is clear from the drawings which illustrate the retaining device (10) in connection with both embodiments for use in allowing for adjustment for different blade thicknesses. Accordingly, withdrawal of this objection to the Specification is respectfully requested.

The Specification was also objected to in view of an error with respect to the reference number for the contact surfaces (6) in paragraph [0038], line 2. This has been corrected along with two additional minor errors in the numbers of the saw blade guides in paragraph [0036]. Accordingly, withdrawal of the objection of the Specification is respectfully requested.

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Claims 3 and 4 are objected under 35 U.S.C. §112, first paragraph, as containing subject matter which is not described in the Specification in such a way as to enable one skilled in the art to make or use the invention. Applicants respectfully traverse this rejection and specifically note that the drawings, paragraphs [0013], [0017] and [0036] specifically disclose the forward and rearward saw blade guides being selectable from a plurality of interchangeable plates having different spacings between the contact surfaces (6) and the drive shaft (2). This refers to the radial spacing on the different ones of the interchangeable plates being different in order to accommodate different sized blades such that the contact surfaces (6) are located against the blade surfaces near the periphery of the blade, and are not extending over the edges of the blade. This is accomplished in accordance with the embodiment of the invention shown in Figures 1 and 2 by providing interchangeable plates that have the contact surfaces located closer to the drive shaft (in the radial direction) for use in connection with a smaller diameter blade. The "adjustability" of the radial distance between the guides is possible by interchanging the plates. However, it is clear that as the plates have the contact surfaces (6) in a fixed position, that they are not adjusted on the individual ones of the plates, but rather through exchanging plates.

With respect to the screw retaining device (10), as noted above, this is used in connection with both embodiments of the invention and either allows the exchangeable

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plates to be interchanged or, when the pivotable mounting (12) shown in the embodiments of Figures 3-5 as utilized, allows the distance between the opposing contact surfaces (6) of the forward and rearward saw blade guides to be adjusted based on a thickness of the saw blade located therebetween. This is clearly explained in connection with Figures 6 and 7 in connection with the Specification at paragraphs [0041] and [0042]. Accordingly, withdrawal of the Section 112, first paragraph rejection of claims 3 and 4 is respectfully requested.

Claims 1-9 were also rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

With respect to claim 1, it was questioned how the forward saw blade guide is one of removable from or pivotable away from the saw blade, and the saw blade is interchangeably mounted. In response, applicants have amended the claims to clarify this to make it clear that the saw blade is interchangeably and removably mounted on the shaft and have further clarified that the drive shaft, with the saw blade thereon is rotated in a drive housing arranged for back and forth movement in a rotation plane of the blade. This is specified at paragraphs [0003], which defines the entire field of this type of circular saw machine to which the invention pertains, as well as in the detailed description at [0035] which states: "The entire functional block shown here of the circular saw machine can be moved back and forth in a pivoting movement in the

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rotation plane of the saw blade for the sawing process." It is clear from this description that the saw blade moves back and forth in the rotation plane of the blade while the blade is being rotated on the drive shaft.

With respect to claim 7, the pivot axis of the hinge being adjusted by an eccentric mounting refers to the eccentric mounting of the hinge pin which allows for a distance adjustment between the forward and rearward blade guides to accommodate different thickness saw blades. This has now been clarified in claim 7 and is illustrated in Figures 8 and 9 of the application as filed and explained in the associated text.

Accordingly, withdrawal of the Section 112, second paragraph rejection of the claims is respectfully requested.

In the Action, claims 1, 2, 5 and 6 were rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent 5,497,684 to Martin. Applicants respectfully traverse this rejection.

The present invention is directed to a circular saw machine in which a saw blade is removably and interchangeably mounted on the drive shaft and at least one rearward and at least one forward saw blade guide are provided that contact the two side surfaces of the blade. The saw blade guides respectively have at least one contact surface that abuts the respective side surface of the saw blade, and for sawing, the drive shaft, with the saw blade thereon, is rotated in a drive housing arranged for back

and forth movement in a rotation plane of the blade. The forward saw blade guide is connected to the drive housing so it is either removable from or pivotable away from the saw blade. A radial distance between the contact surfaces of the saw blade guides and the drive shaft is adjustable in pre-determined defined positions for matching different diameter saw blades in that the forward saw blade guide is selectable from a plurality interchangeable plates having different spacings between the contact surfaces and the drive shaft, or the contact surface of at least one of the saw blade guides is installed on a mounting that is pivotable in a direction parallel to the plane of the saw blade on the saw blade guide, with the mounting being fixable at a plurality of pre-determined pivot angles.

Martin is directed to a saw blade guide used in connection with a fixed mounted saw blade, for example in a log sawing mill, in which the blade is mounted in a fixed position. A carriage carries the log back and forth so that it is sawed by the blade with every pass. See column 4, lines 20-25. Accordingly, Martin is not directed to a circular saw machine in which the drive shaft with the saw blade thereon is rotated in a drive housing that is arranged for back and forth movement in a rotation plane of the blade. Specifically, the saw blade drive assembly of Martin remains fixed while in the present invention the entire saw blade assembly is moved back and forth in order to make a cut.

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Even if Martin could still be applied, the guidance system for reducing the key width is formed from opposing arms. Contrary to the suggestion in the Action that Martin teaches the saw blade guides (26, 27) being adjustable to predetermined defined positions for matching the diameter of saw blades, the arms (26, 27) on one side of the saw blade are pivotable from a single use position, illustrated in Figure 1, to a retracted position in order to allow removal and replacement of the blade. However, there is no suggestion or disclosure that the arms (26, 27) are fixable at a plurality of predetermined pivot angles to adjust for blades of different sizes.

Accordingly, claim 1 should be patentable over Martin for at least the reasons noted above. Withdrawal of the Section 102(b) rejection of claim 1 in view of Martin is therefore respectfully requested.

Claims 2, 5 and 6 have been incorporated into claim 1 and accordingly, no further comment is required with respect to these claims.

In the Action, claims 1 and 2 were also rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent, 4,323,145 to Allen. Applicants respectfully traverse this rejection.

Allen is directed to a vibration damping method for a saw blade in which damper pads are located against opposing sides of the saw blade and are mounted for pivoting movement toward and away from a surface of the saw blade by support tubes (2, 2'),

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which are pivotably mounted on bearing rods (7, 7'). The damper is mounted between the opposing ends of the support tubes opposite the pads. There is no suggestion or disclosure that the circular saw of Allen includes a saw blade mounted on a drive shaft which is rotated in a drive housing that is arranged for back and forth movement in a rotation plane of the blade. Since the damping elements are mounted on a support block fastened to the stationary base of the saw mechanism, see column 8, lines 10-13, it would therefore appear that the saw blade itself is stationary. Otherwise it would move out of contact with the dampers provided. Additionally, there is no suggestion or disclosure of adjusting a distance between the contact surfaces and the drive shaft using either interchangeable plates or an adjustable mounting, with the mounting being fixable in a plurality of predetermined pivot angles.

In view of these differences, withdrawal of the Section 102(b) rejection of claim 1 in view of Allen is respectfully requested.

It was noted in the Action that claims 7-9 would be allowable if rewritten to overcome the 35 U.S.C. §112, second paragraph rejections and to include all the limitations of the base claim and any intervening claims. In view of this, claim 7 has been rewritten in independent form and is now believed to be in condition for allowance. Claims 8 and 9 depend from claim 7 and should also be allowable.

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If the examiner believes that any additional formal matters need to be addressed in order to place the application in condition for allowance or that a telephone interview would help to materially advance the prosecution of this application, the examiner is invited to contact the undersigned by telephone in order to address these matters.

In view of the foregoing Amendments and Remarks, applicants respectfully submit that the present application, including claims 1, 2, 4 and 7-9, are in condition for allowance, and a Notice to that affect is respectfully solicited.

Respectfully submitted,

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